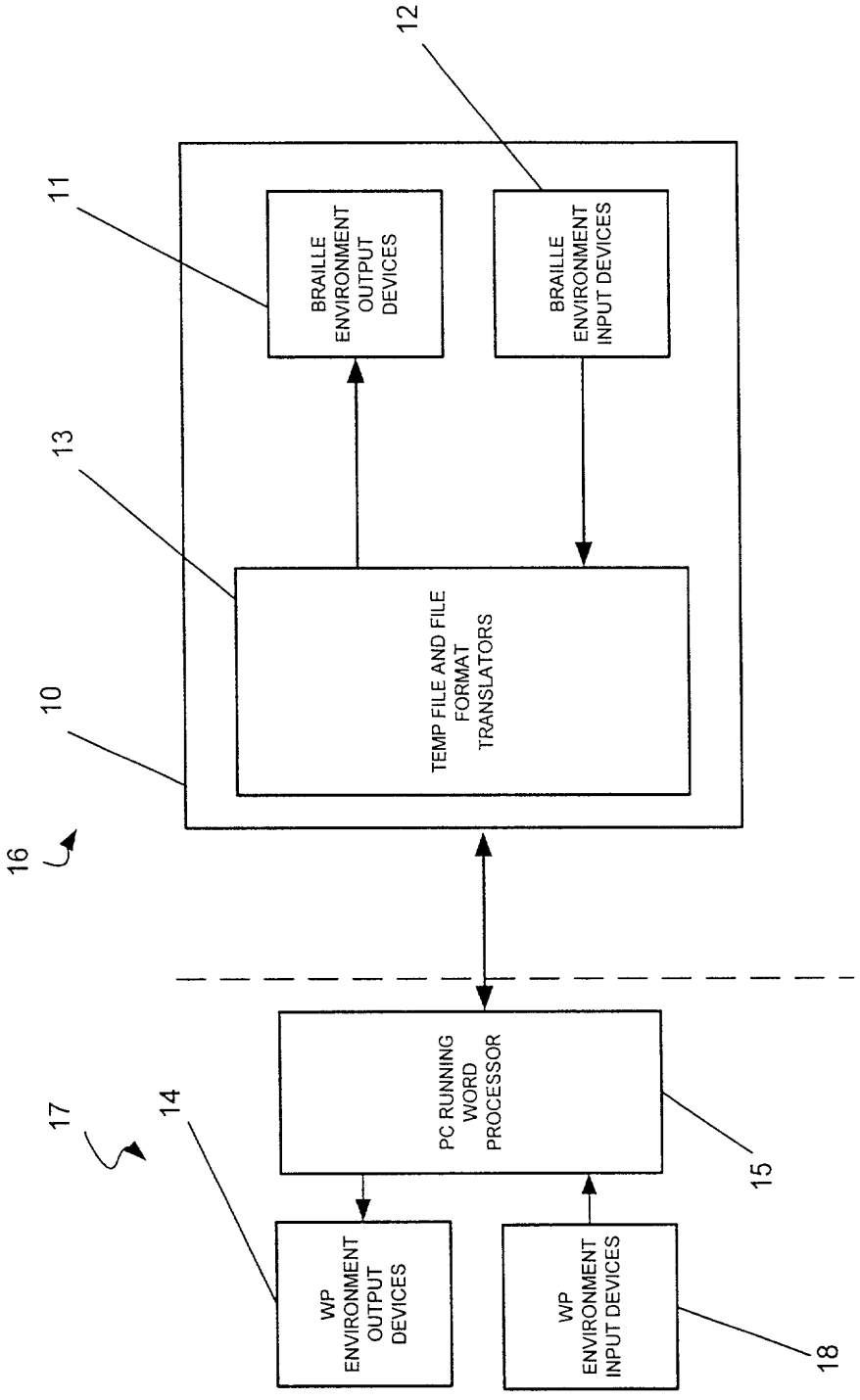
12
11
BRAILLE ENVIRONMENT OUTPUT DEVICES
BRAILLE ENVIRONMENT INPUT DEVICES
13
TEMP FILE AND FILE FORMAT TRANSLATORS
10
16
17
14
PC RUNNING WORD PROCESSOR
15
WP ENVIRONMENT OUTPUT DEVICES
WP ENVIRONMENT INPUT DEVICES
18

FIGURE 1

Doc 3 Sheet 2 of 5

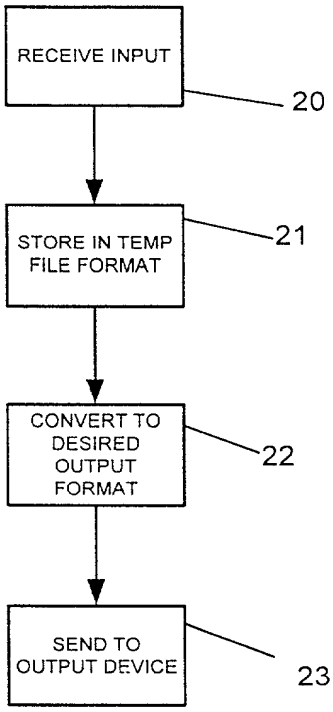

FIGURE 2

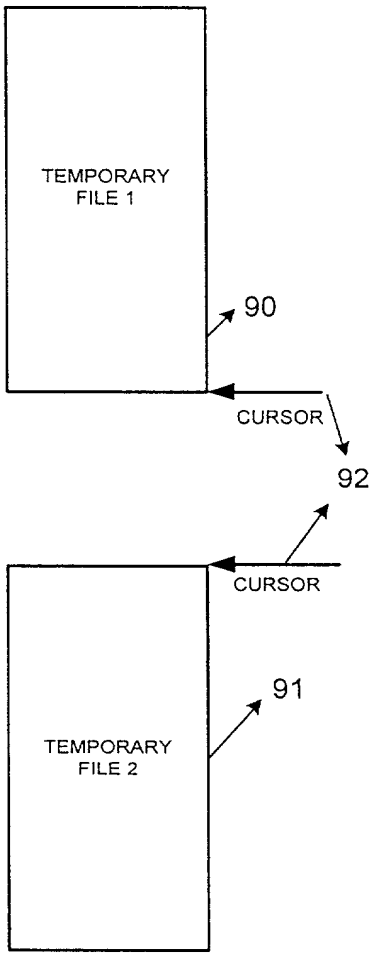

FIGURE 9A

WO 2004/053650 PCT/US2003/039015

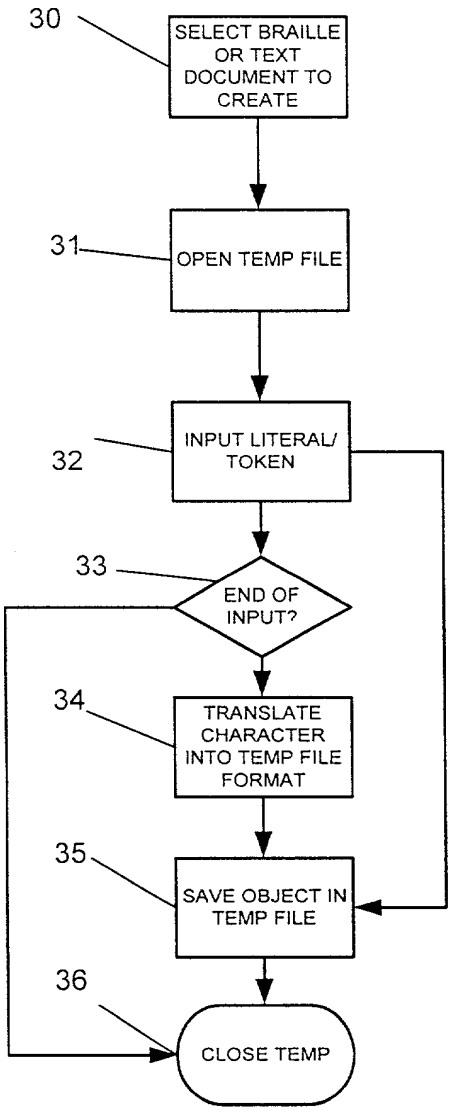

FIGURE 3

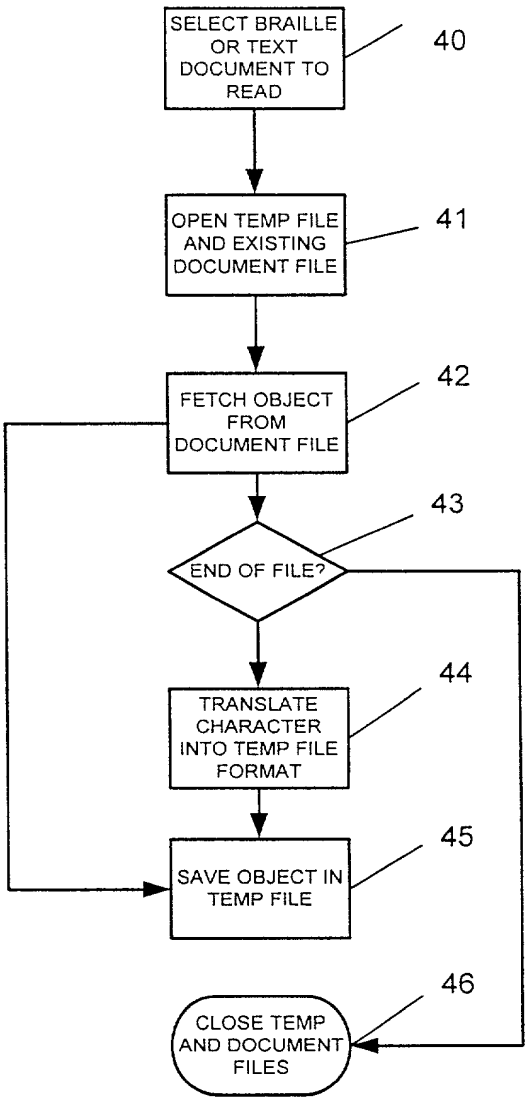

FIGURE 4

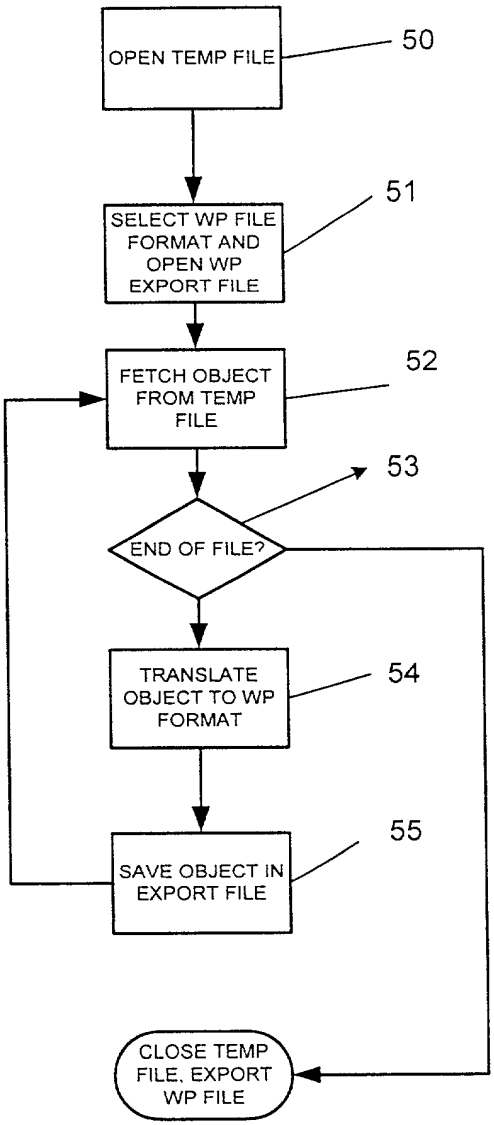
OPEN TEMP FILE
50
SELECT WP FILE FORMAT AND OPEN WP EXPORT FILE
51
FETCH OBJECT FROM TEMP FILE
52
53
END OF FILE?
TRANSLATE OBJECT TO WP FORMAT
54
SAVE OBJECT IN EXPORT FILE
55
CLOSE TEMP FILE, EXPORT WP FILE

FIGURE 5

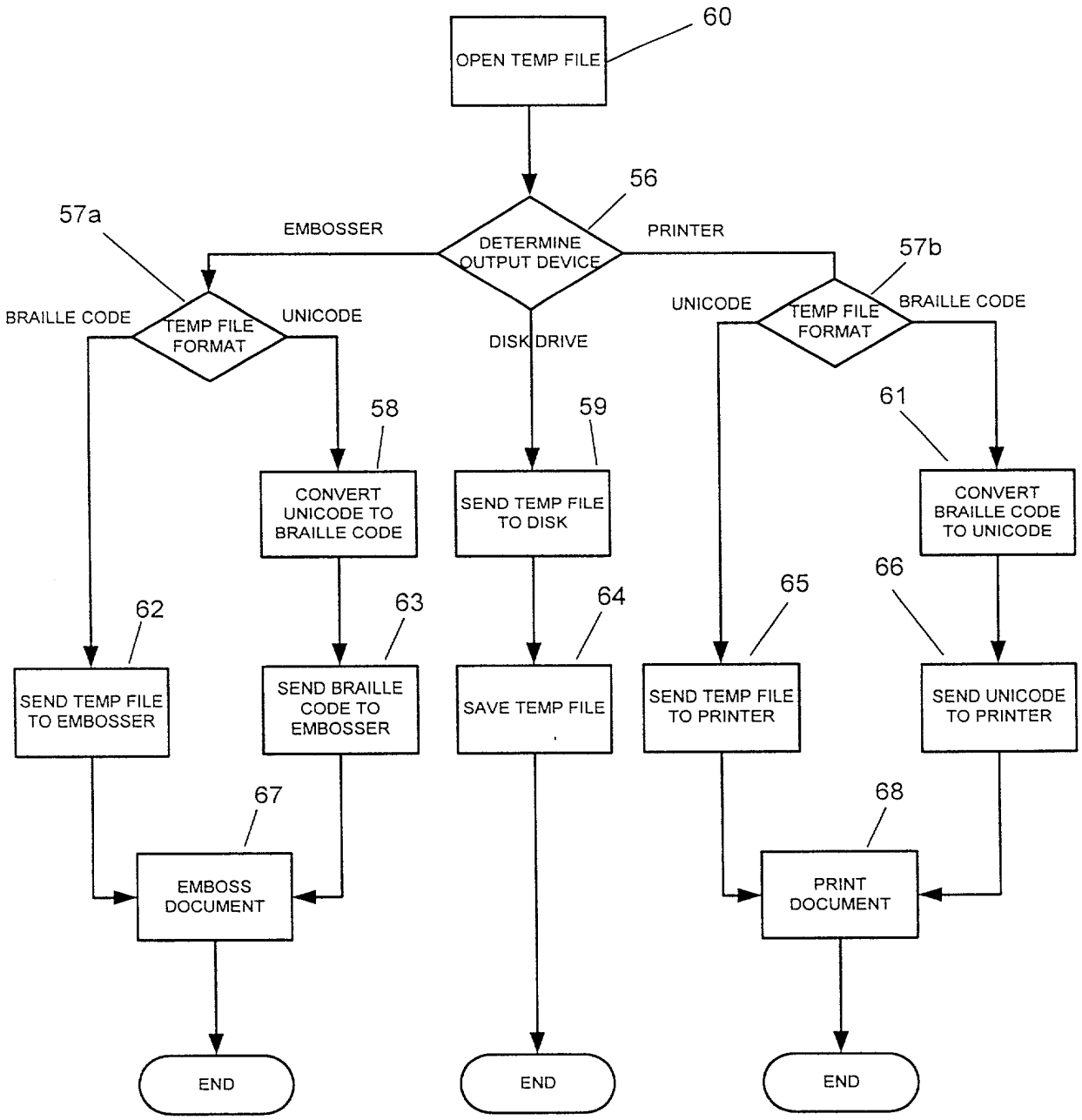
OPEN TEMP FILE
60
DETERMINE OUTPUT DEVICE
56
EMBOSSER
PRINTER
DISK DRIVE
57a
57b
TEMP FILE FORMAT
BRAILLE CODE
UNICODE
TEMP FILE FORMAT
UNICODE
BRAILLE CODE
58
59
61
CONVERT UNICODE TO BRAILLE CODE
SEND TEMP FILE TO DISK
CONVERT BRAILLE CODE TO UNICODE
62
63
64
65
66
SEND TEMP FILE TO EMBOSSER
SEND BRAILLE CODE TO EMBOSSER
SAVE TEMP FILE
SEND TEMP FILE TO PRINTER
SEND UNICODE TO PRINTER
67
68
EMBOSS DOCUMENT
PRINT DOCUMENT
END
END
END

FIGURE 6

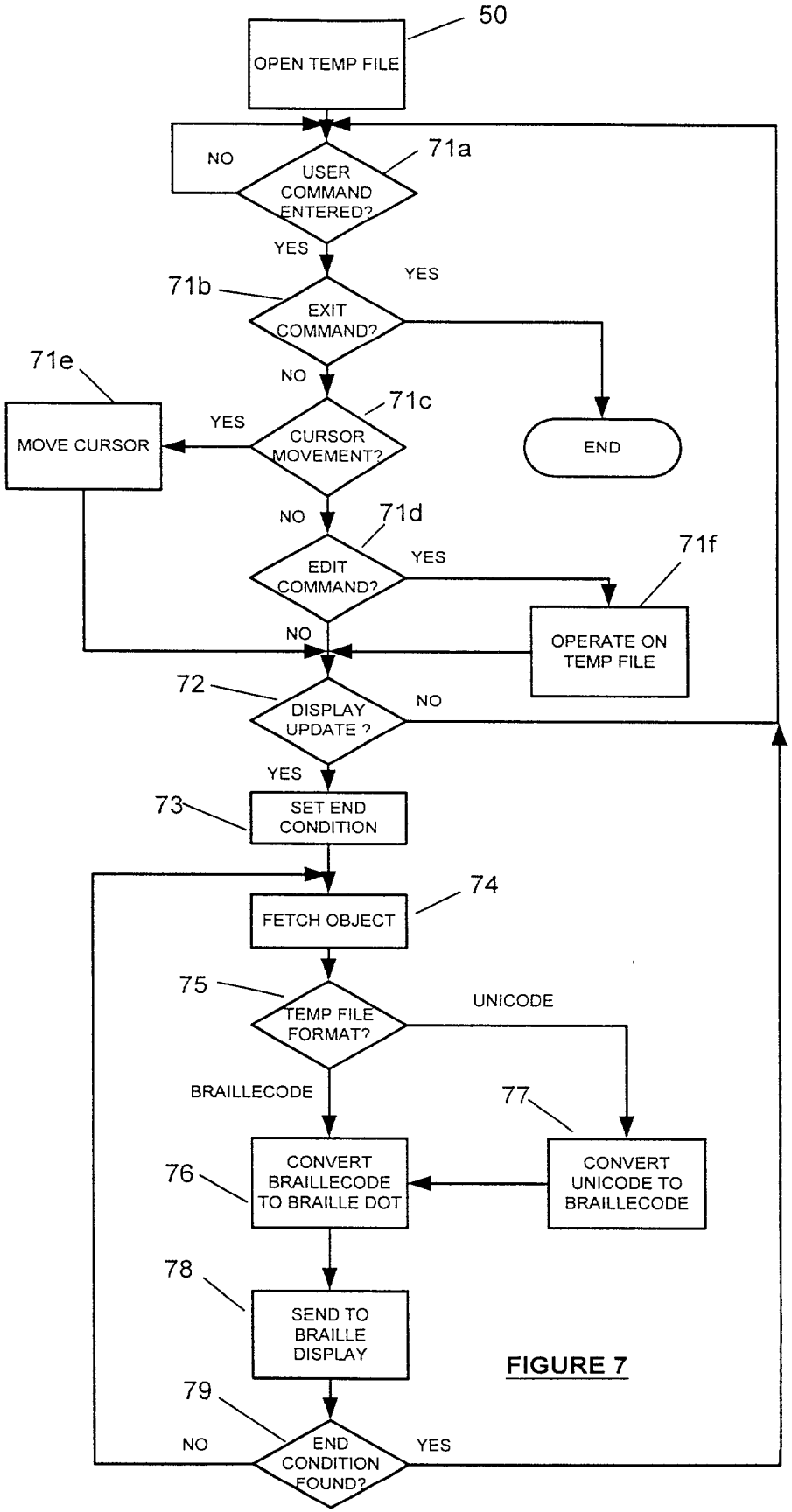

FIGURE 7

Attorney Docket No. 95654-0520

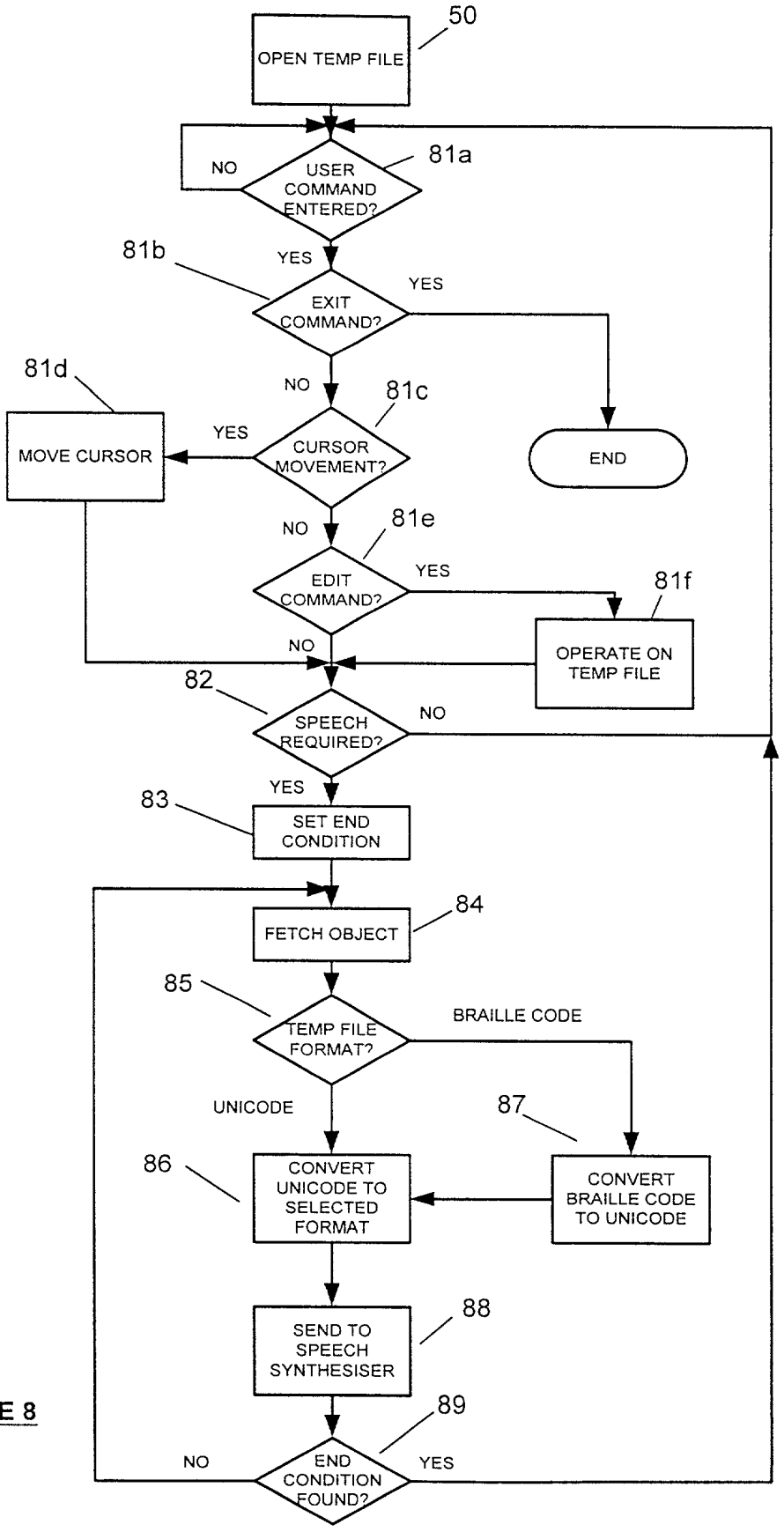
OPEN TEMP FILE
50
USER COMMAND ENTERED?
81a
NO
YES
EXIT COMMAND?
81b
YES
NO
END
CURSOR MOVEMENT?
81c
YES
MOVE CURSOR
81d
NO
EDIT COMMAND?
81e
YES
OPERATE ON TEMP FILE
81f
NO
SPEECH REQUIRED?
82
NO
YES
SET END CONDITION
83
FETCH OBJECT
84
TEMP FILE FORMAT?
85
BRAILLE CODE
UNICODE
CONVERT UNICODE TO SELECTED FORMAT
86
CONVERT BRAILLE CODE TO UNICODE
87
SEND TO SPEECH SYNTHESISER
88
END CONDITION FOUND?
89
NO
YES

FIGURE 8

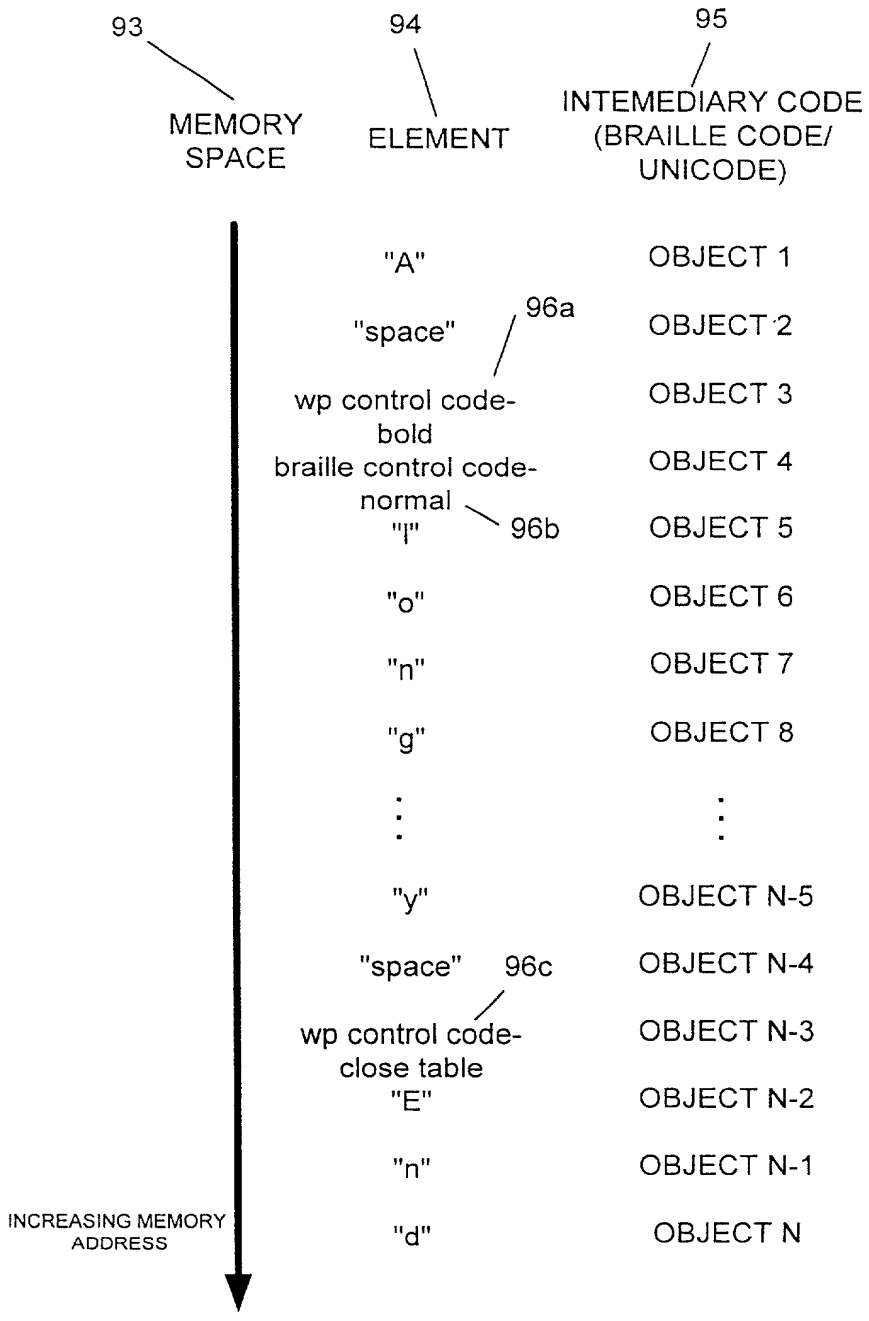

FIGURE 9B

4050-0950-0950

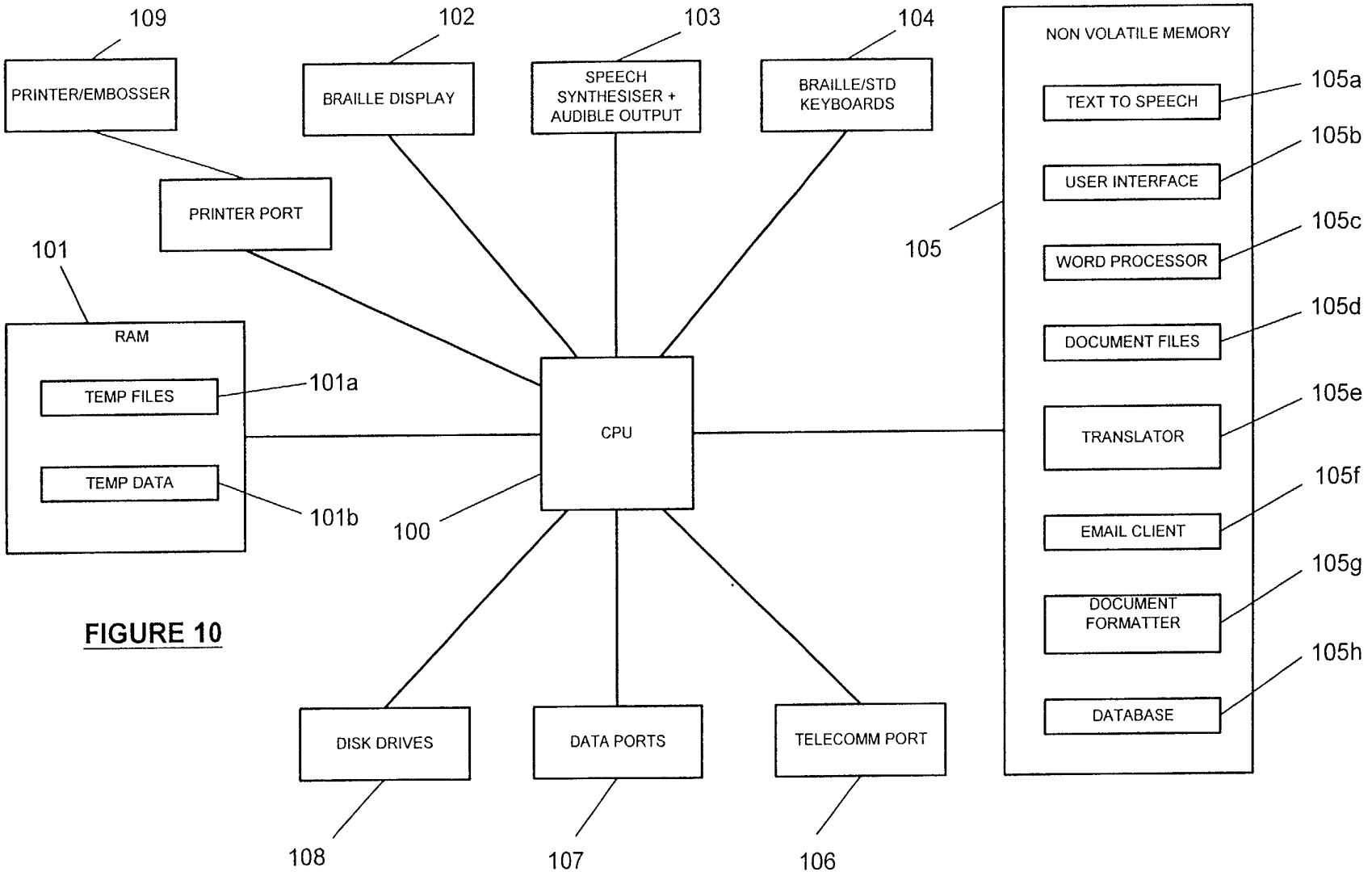
109
PRINTER/EMBOSSER
102
BRAILLE DISPLAY
103
SPEECH SYNTHESISER + AUDIBLE OUTPUT
104
BRAILLE/STD KEYBOARDS
NON VOLATILE MEMORY
105a
TEXT TO SPEECH
105b
USER INTERFACE
105c
WORD PROCESSOR
105d
DOCUMENT FILES
105e
TRANSLATOR
105f
EMAIL CLIENT
105g
DOCUMENT FORMATTER
105h
DATABASE
105
PRINTER PORT
101
RAM
TEMP FILES
101a
TEMP DATA
101b
CPU
100
DISK DRIVES
DATA PORTS
TELECOMM PORT
108
107
106

FIGURE 10

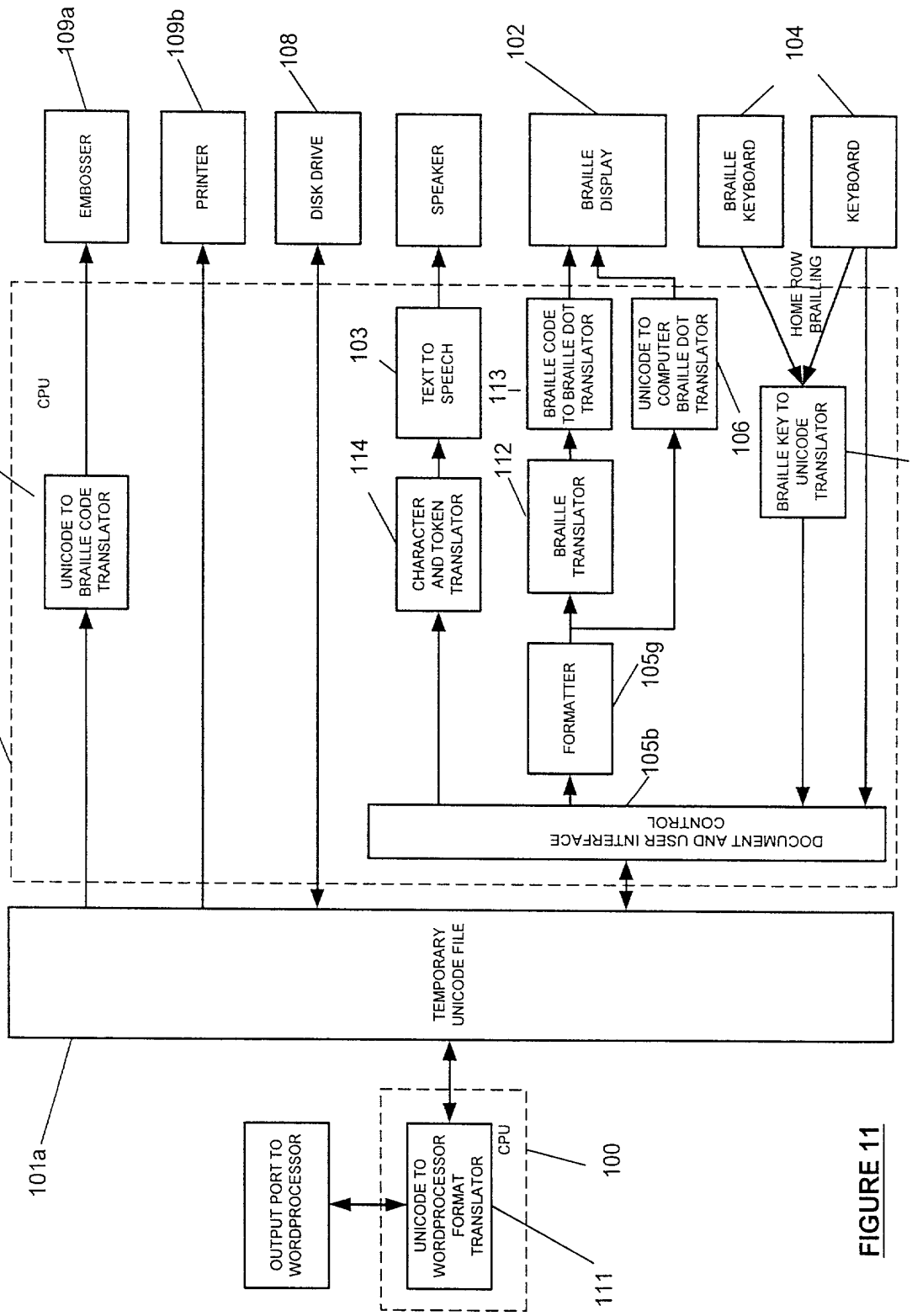
101a
OUTPUT PORT TO WORDPROCESSOR
UNICODE TO WORDPROCESSOR FORMAT TRANSLATOR
CPU
100
111
TEMPORARY UNICODE FILE
100
CPU
115
UNICODE TO BRAILLE CODE TRANSLATOR
DOCUMENT AND USER INTERFACE CONTROL
105b
FORMATTER
105g
CHARACTER AND TOKEN TRANSLATOR
114
TEXT TO SPEECH
103
BRAILLE TRANSLATOR
112
BRAILLE CODE TO BRAILLE DOT TRANSLATOR
113
UNICODE TO COMPUTER BRAILLE DOT TRANSLATOR
106
BRAILLE KEY TO UNICODE TRANSLATOR
110
HOME ROW BRAILLING
EMBOSSER
109a
PRINTER
109b
DISK DRIVE
108
SPEAKER
BRAILLE DISPLAY
102
BRAILLE KEYBOARD
KEYBOARD
104

FIGURE 11

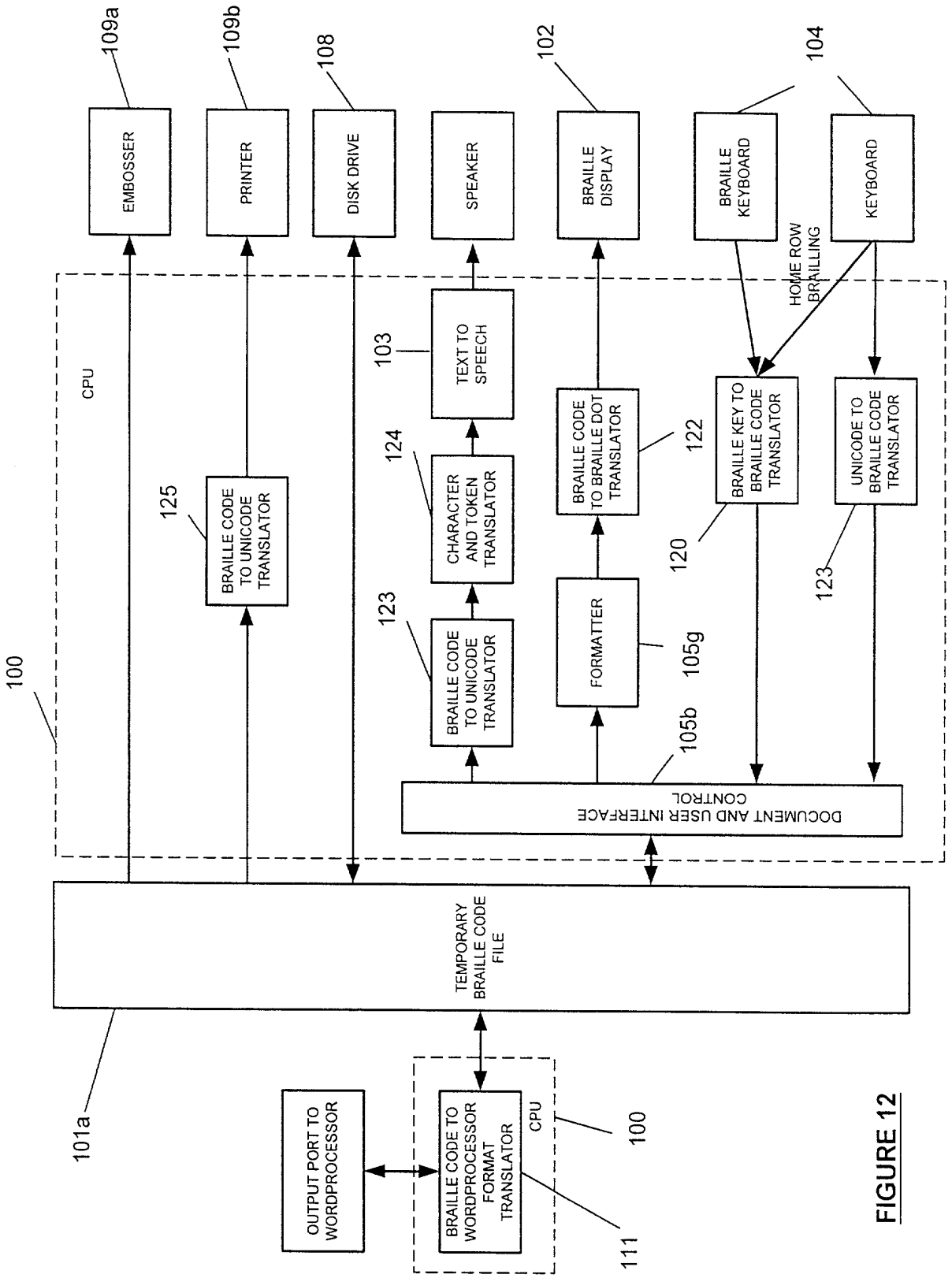
109a
EMBOSSER
109b
PRINTER
108
DISK DRIVE
102
BRAILLE DISPLAY
104
BRAILLE KEYBOARD
KEYBOARD
HOME ROW BRAILLING
100
CPU
103
TEXT TO SPEECH
124
CHARACTER AND TOKEN TRANSLATOR
125
BRAILLE CODE TO UNICODE TRANSLATOR
123
BRAILLE CODE TO UNICODE TRANSLATOR
FORMATTER
105g
105b
BRAILLE CODE TO BRAILLE DOT TRANSLATOR
122
BRAILLE KEY TO BRAILLE CODE TRANSLATOR
120
UNICODE TO BRAILLE CODE TRANSLATOR
123
DOCUMENT AND USER INTERFACE CONTROL
TEMPORARY BRAILLE CODE FILE
101a
OUTPUT PORT TO WORDPROCESSOR
BRAILLE CODE TO WORDPROCESSOR FORMAT TRANSLATOR
CPU
100
111

FIGURE 12